

PCT09

#9

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/980,916

DATE: 12/21/2001
TIME: 13:06:23

Input Set : A:\3631-0112P.txt
Output Set: N:\CRF3\12212001\I980916.raw

ENTERED

3 <110> APPLICANT: M&E Biotech A/S
4 Klysner, Steen
6 <120> TITLE OF INVENTION: Method For Down-Regulating IL5 Activity
8 <130> FILE REFERENCE: 3631-0112P

C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/980,916
C--> 11 <141> CURRENT FILING DATE: 2001-10-23
13 <160> NUMBER OF SEQ ID NOS: 65
15 <170> SOFTWARE: PatentIn Ver. 2.1
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 115
19 <212> TYPE: PRT
20 <213> ORGANISM: Homo sapiens
22 <220> FEATURE:
23 <221> NAME/KEY: DISULFID
24 <222> LOCATION: (44)
25 <223> OTHER INFORMATION: Interchain disulphide bond to Cys-86 in SEQ ID
26 NO:1
28 <220> FEATURE:
29 <221> NAME/KEY: DISULFID
30 <222> LOCATION: (86)
31 <223> OTHER INFORMATION: Interchain disulphide bond to Cys-44 in SEQ ID
32 NO:1
34 <400> SEQUENCE: 1
35 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala
36 1 5 10 15
38 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg
39 20 25 30
41 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile
42 35 40 45
44 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr
45 50 55 60
47 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp
48 65 70 75 80
50 Gly Gln Lys Lys Cys Gly Glu Arg Arg Arg Val Asn Gln Phe
51 85 90 95
53 Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Glu Trp Ile
54 100 105 110
56 Ile Glu Ser
57 115
61 <210> SEQ ID NO: 2
62 <211> LENGTH: 126
63 <212> TYPE: PRT
64 <213> ORGANISM: Artificial Sequence
66 <220> FEATURE:
67 <223> OTHER INFORMATION: Description of Artificial Sequence:Human IL5
68 modified by substitution with tetanus toxoid P2
69 epitope

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/980,916

DATE: 12/21/2001
TIME: 13:06:23

Input Set : A:\3631-0112P.txt
Output Set: N:\CRF3\12212001\I980916.raw

71 <220> FEATURE:
72 <221> NAME/KEY: MUTAGEN
73 <222> LOCATION: (32)..(46)
74 <223> OTHER INFORMATION: Tetanus toxoid P2 epitope (SEQ ID NO: 23)
76 <220> FEATURE:
77 <221> NAME/KEY: SIMILAR
78 <222> LOCATION: (1)..(86)
79 <223> OTHER INFORMATION: Identical to residues 1-86 in SEQ ID NO: 1
81 <220> FEATURE:
82 <221> NAME/KEY: SIMILAR
83 <222> LOCATION: (102)..(126)
84 <223> OTHER INFORMATION: Identical to residues 91-115 in SEQ ID NO: 1
86 <400> SEQUENCE: 2
87 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala
88 1 5 10 15
90 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg
91 20 25 30
93 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile
94 35 40 45
96 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr
97 50 55 60
99 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp
100 65 70 75 80
102 Gly Gln Lys Lys Cys Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile
103 85 90 95
105 Gly Ile Thr Glu Leu Arg Arg Val Asn Gln Phe Leu Asp Tyr Leu Gln
106 100 105 110
108 Glu Phe Leu Gly Val Met Asn Thr Glu Trp Ile Ile Glu Ser
109 115 120 125
113 <210> SEQ ID NO: 3
114 <211> LENGTH: 118
115 <212> TYPE: PRT
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Description of Artificial Sequence:Human IL5
120 modified by substitution with tetanus toxoid P2
121 epitope
123 <220> FEATURE:
124 <221> NAME/KEY: MUTAGEN
125 <222> LOCATION: (32)..(46)
126 <223> OTHER INFORMATION: Tetanus toxoid P2 epitope (SEQ ID NO: 23)
128 <220> FEATURE:
129 <221> NAME/KEY: SIMILAR
130 <222> LOCATION: (1)..(31)
131 <223> OTHER INFORMATION: Identical to residues 1-31 in SEQ ID NO: 1
133 <220> FEATURE:
134 <221> NAME/KEY: SIMILAR
135 <222> LOCATION: (47)..(118)
136 <223> OTHER INFORMATION: Identical to residues 44-115 in SEQ ID NO: 1

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/980,916

DATE: 12/21/2001
TIME: 13:06:23

Input Set : A:\3631-0112P.txt
Output Set: N:\CRF3\12212001\I980916.raw

138 <400> SEQUENCE: 3
139 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala
140 1 5 10 15
142 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Gln
143 20 25 30
145 Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Leu Cys Thr
146 35 40 45
148 Glu Glu Ile Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln
149 50 55 60
151 Gly Gly Thr Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys
152 65 70 75 80
154 Tyr Ile Asp Gly Gln Lys Lys Cys Gly Glu Glu Arg Arg Arg Val
155 85 90 95
157 Asn Gln Phe Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr
158 100 105 110
160 Glu Trp Ile Ile Glu Ser
161 115
165 <210> SEQ ID NO: 4
166 <211> LENGTH: 124
167 <212> TYPE: PRT
168 <213> ORGANISM: Artificial Sequence
170 <220> FEATURE:
171 <223> OTHER INFORMATION: Description of Artificial Sequence: Human IL5
172 modified by substitution with tetanus toxoid P2
173 epitope
175 <220> FEATURE:
176 <221> NAME/KEY: MUTAGEN
177 <222> LOCATION: (59)..(73)
178 <223> OTHER INFORMATION: Tetanus toxoid P2 epitope (SEQ ID NO: 23)
180 <220> FEATURE:
181 <221> NAME/KEY: SIMILAR
182 <222> LOCATION: (1)..(58)
183 <223> OTHER INFORMATION: Identical to residues 1-58 in SEQ ID NO: 1
185 <220> FEATURE:
186 <221> NAME/KEY: SIMILAR
187 <222> LOCATION: (74)..(124)
188 <223> OTHER INFORMATION: Identical to residues 65-115 in SEQ ID NO: 1
190 <400> SEQUENCE: 4
191 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala
192 1 5 10 15
194 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg
195 20 25 30
197 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile
198 35 40 45
200 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Gln Tyr Ile Lys Ala Asn
201 50 55 60
203 Ser Lys Phe Ile Gly Ile Thr Glu Leu Val Glu Arg Leu Phe Lys Asn
204 65 70 75 80
206 Leu Ser Leu Ile Lys Lys Tyr Ile Asp Gly Gln Lys Lys Cys Gly

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/980,916

DATE: 12/21/2001
TIME: 13:06:23

Input Set : A:\3631-0112P.txt
Output Set: N:\CRF3\12212001\I980916.raw

207 85 90 95
209 Glu Glu Arg Arg Arg Val Asn Gln Phe Leu Asp Tyr Leu Gln Glu Phe
210 100 105 110
212 Leu Gly Val Met Asn Thr Glu Trp Ile Ile Glu Ser
213 115 120
217 <210> SEQ ID NO: 5
218 <211> LENGTH: 124
219 <212> TYPE: PRT
220 <213> ORGANISM: Artificial Sequence
222 <220> FEATURE:
223 <223> OTHER INFORMATION: Description of Artificial Sequence:Human IL5
224 modified by substitution with tetanus toxoid P2
225 epitope
227 <220> FEATURE:
228 <221> NAME/KEY: MUTAGEN
229 <222> LOCATION: (86)..(100)
230 <223> OTHER INFORMATION: Tetanus toxoid P2 epitope (SEQ ID NO: 23)
232 <220> FEATURE:
233 <221> NAME/KEY: SIMILAR
234 <222> LOCATION: (1)..(85)
235 <223> OTHER INFORMATION: Identical to residues 1-85 in SEQ ID NO: 1
237 <220> FEATURE:
238 <221> NAME/KEY: SIMILAR
239 <222> LOCATION: (101)..(124)
240 <223> OTHER INFORMATION: Identical to residues 90-115 in SEQ ID NO: 1
242 <400> SEQUENCE: 5
243 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala
244 1 5 10 15
246 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg
247 20 25 30
249 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile
250 35 40 45
252 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr
253 50 55 60
255 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp
256 65 70 75 80
258 Gly Gln Lys Lys Lys Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly
259 85 90 95
261 Ile Thr Glu Leu Arg Val Asn Gln Phe Leu Asp Tyr Leu Gln Glu Phe
262 100 105 110
264 Leu Gly Val Met Asn Thr Glu Trp Ile Ile Glu Ser
265 115 120
269 <210> SEQ ID NO: 6
270 <211> LENGTH: 126
271 <212> TYPE: PRT
272 <213> ORGANISM: Artificial Sequence
274 <220> FEATURE:
275 <223> OTHER INFORMATION: Description of Artificial Sequence:Human IL5
276 modified by substitution with tetanus toxoid P2

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/980,916

DATE: 12/21/2001
TIME: 13:06:23

Input Set : A:\3631-0112P.txt
Output Set: N:\CRF3\12212001\I980916.raw

277 epitope
279 <220> FEATURE:
280 <221> NAME/KEY: MUTAGEN
281 <222> LOCATION: (110)..(124)
282 <223> OTHER INFORMATION: Tetanus toxoid P2 epitope (SEQ ID NO: 23)
284 <220> FEATURE:
285 <221> NAME/KEY: SIMILAR
286 <222> LOCATION: (1)..(109)
287 <223> OTHER INFORMATION: Identical to residues 1-109 in SEQ ID NO: 1
289 <220> FEATURE:
290 <221> NAME/KEY: SIMILAR
291 <222> LOCATION: (125)..(126)
292 <223> OTHER INFORMATION: Identical to residues 114-115 in SEQ ID NO: 1
294 <400> SEQUENCE: 6
295 Ile Pro Thr Glu Ile Pro Thr Ser Ala Leu Val Lys Glu Thr Leu Ala
296 1 5 10 15
298 Leu Leu Ser Thr His Arg Thr Leu Leu Ile Ala Asn Glu Thr Leu Arg
299 20 25 30
301 Ile Pro Val Pro Val His Lys Asn His Gln Leu Cys Thr Glu Glu Ile
302 35 40 45
304 Phe Gln Gly Ile Gly Thr Leu Glu Ser Gln Thr Val Gln Gly Gly Thr
305 50 55 60
307 Val Glu Arg Leu Phe Lys Asn Leu Ser Leu Ile Lys Lys Tyr Ile Asp
308 65 70 75 80
310 Gly Gln Lys Lys Cys Gly Glu Glu Arg Arg Arg Val Asn Gln Phe
311 85 90 95
313 Leu Asp Tyr Leu Gln Glu Phe Leu Gly Val Met Asn Thr Gln Tyr Ile
314 100 105 110
316 Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Leu Glu Ser
317 115 120 125
321 <210> SEQ ID NO: 7
322 <211> LENGTH: 132
323 <212> TYPE: PRT
324 <213> ORGANISM: Artificial Sequence
326 <220> FEATURE:
327 <223> OTHER INFORMATION: Description of Artificial Sequence:Human IL5
328 modified by substitution with tetanus toxoid P30
329 epitope
331 <220> FEATURE:
332 <221> NAME/KEY: MUTAGEN
333 <222> LOCATION: (87)..(107)
334 <223> OTHER INFORMATION: Tetanus toxoid P30 epitope (SEQ ID NO: 24)
336 <220> FEATURE:
337 <221> NAME/KEY: SIMILAR
338 <222> LOCATION: (1)..(86)
339 <223> OTHER INFORMATION: Identical to residues 1-86 in SEQ ID NO: 1
341 <220> FEATURE:
342 <221> NAME/KEY: SIMILAR
343 <222> LOCATION: (108)..(132)

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/980,916

DATE: 12/21/2001

TIME: 13:06:24

Input Set : A:\3631-0112P.txt

Output Set: N:\CRF3\12212001\I980916.raw

L:10 M:270 C: Current Application Number differs, Replaced Application Number

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

0969005176 - 0214902